

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): A projection display device having an optical system, the optical system comprising:

a light source for emitting lights along a first direction to define an optical axis, wherein the light source is coaxially disposed with the optical axis; and

a light pipe, non-coaxially disposed with the optical axis, receiving the lights from the light source and transmitting lights with a virtual arc array,

wherein the light pipe deviates from the optical axis by a predetermined distance in a second direction perpendicular to the first direction, so that the lights with the virtual arc array is asymmetrical.

Claim 2 (Original): The device as claimed in claim 1, wherein the predetermined distance is substantially between 0.3 and 0.7mm.

Claim 3 (Original): The device as claimed in claim 1, further comprising a convergent lens, positioned between the light source and the light pipe, to focus the lights from the light source to the light pipe.

Claim 4 (Original): The device as claimed in claim 3, wherein the light pipe comprises a lens module for receiving focused lights transmitted from the convergent lens, and outputting the focused lights uniformly.

Claim 5 (Original); The device as claimed in claim 1, further comprising a relay lens module and a projection plane, wherein the relay lens module relays the lights from the light pipe to the projection plane.

Claim 6 (Original): The device as claimed in claim 5, wherein the relay lens module comprises a spherical lens and an aspherical lens.

Claim 7 (Original): The device as claimed in claim 1, wherein the projection display device is a DLP (digital light processing) projector.

Claim 8 (Original): The device as claimed in claim 1, wherein the first direction is parallel to an axis on a XY-plane, and the second direction corresponds to a Z-axis.

Claim 9 (Original): The device as claimed in claim 1, wherein the light pipe deviates oppositely from the light source.

Claim 10 (New): A projection display device having an optical system, the optical system comprising:

- a light source for emitting lights along a first direction to define an optical axis, wherein the light source is non-coaxially disposed with the optical axis; and

- a light pipe, coaxially disposed with the optical axis, receiving the lights from the light source and transmitting lights with a virtual arc array,

- wherein the light source deviates from the optical axis by a predetermined distance in a second direction perpendicular to the first direction, so that the lights with the virtual arc array is asymmetrical.

Claim 11 (New): The device as claimed in claim 10, wherein the predetermined distance is substantially between 0.3 and 0.7mm.